UNITED STATES PATENT AND TRADEMARK OFFICE



Examiner: Nathanial C. Chukwurah

Art Unit: 3721

In re:

Applicant:

KRAENZLER, E., et al

Serial No.:

10/049,546

Filed:

06/05/2003

BRIEF ON APPEAL

August 21, 2007

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is a Brief on Appeal from the final rejection of claims 16,

17, 19-28 and 33-39 by the Examiner.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Real Party of Interest

The real party of interest in this application is Robert Bosch GmbH having a business address of Postfach 30 02 20, D-70442 Stuttgart, Germany.

Related Appeals and Interferences

There are no pending appeals, interferences, or judicial proceedings known to appellant, the appellant's legal representative or assignee which may be related to, directly affect, or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of Claims

The present application includes claims 16-28 and 33-39.

Claim 18 is allowed by the Examiner.

Claims 16-17, 19-28, and 33-39 are rejected by the Examiner.

Appellant therefore appeals from the Final Rejection of claims 16-17, 19-28 and 33-39 by the Examiner.

Status of Amendments

The Final Office Action in this application was issued on February 1, 2007.

After the Final Action a Request for Reconsideration was filed dated May 1, 2007, and the Supplemental Request for Reconsideration was filed dated May 23, 2007.

The Request for Reconsideration of May 1, 2007 was not entered by the Examiner.

Summary of Claimed Subject Matter

The present invention deals with a power tool which has at least one handle 10, 26, 50, 62, 104.

The handle has at least one grip part 12, 72, 106, that is firmly connected to and firmly held at a mounting part 16, 70, 110, by at least one elastic, vibration-damping element 14, 24, 52, 101 located between the grip part and the mounting part. The grip part is affixed to the housing via the mounting part which is screwed into the housing so that the elastic element is mounted to the housing through the mounting part and also mounted to the grip part.

The connection between the grip part and the mounting part by means of the elastic element is secured by at least one movable retaining element 20, 22, 28, 64, 112 that prevents a separation of the grip part from the housing if the elastic element is damaged and ensures control of the power tool via the grip part at all times.

One embodiment of the power tool of the present invention with the handle 10, the grip part 12, the mounting part 16, the vibration-damping elastic element 14 and the movable retaining element 20 is described in lines 13-31 on page 6 and lines 1-4 on page 7 of the specification and shown in Figures 1 and 2.

Another embodiment of the power tool of the present invention with the handle 26, the grip part 12, the mounting part 16, the elastic element 24 and the retaining element 22 is described in lines 6-20 on page 7 and shown in Figure 3.

A further embodiment of the power tool of the present invention with the handle 62, the grip part 72, the mounting part 17, the elastic element 24 and the retaining element 64 is described in lines 16-26 on page 8 and shown in Figures 4 and 5.

A further embodiment of the power tool of the present invention with the handle 50, the grip part 12, the mounting part 16, the elastic element 52, and the retaining element 28 is described in lines 21-28 on page 9 and shown in Figure 6.

Still a further embodiment of the power tool in accordance with the present invention with the handle 104, the grip part 106, the mounting part 110, the elastic element 108 and the retaining element 112 is disclosed in lines 8-12 on page 10 and shown in Figures 7-12.

Grounds of Rejection to be Reviewed on Appeal

U.S.C. 112, second paragraph, as being indefinite because of the term "means".

Thus, the first ground of the rejection to be reviewed on appeal is whether claim 36 is rejectable under 35 U.S.C. 112 for the above mentioned reason.

Claims 16-17, 19-20, 22-26, 28 and 33-39 are rejected under 35 U.S.C. 103(a) over the U.S. patent to Forderer in view of the U.S. patent to Dorner.

Claims 21 and 27 were rejected under 35 U.S.C. 103(a) over the patent to Forderer in view of the patent to Raddle. These claims depend on claim 16, the broadest claims on file, and share its features and they stand and fall together with claim 16.

Claims 17, 19-20, 22-26, 28 and 33-39 also depend on claim 16, they share its features, they stand and fall together with claim 16.

Thus, the second ground of rejection to be reviewed on appeal is whether claim 16 can be considered as patentable in the sense of 35 U.S.C. 103(a) over the patent Forderer in view of the patent to Dorner.

Argument

It is respectfully submitted that the new features of the present invention that are defined in claim 16 clearly and patentably distinguish the present invention from the prior art applied by the Examiner.

In the Final Office Action the Examiner rejected claim 36 for formal reasons under 35 U.S.C. 112. Appellants herewith submits a Simultaneous Amendment in which it is proposed to amend claim 36 to eliminate the grounds for the rejection under 35 U.S.C. 112. Claim 36

should be considered as no longer rejectable under 35 U.S.C. 112. It is believed that this is how the first ground to be reviewed on appealed has to be dealt with.

In connection with the Examiner's rejection with the claims over the art, it is believed to be advisable first of all to analyze claim 16, the broadest claim on file. Claim 16 defines a power tool

with at least one handle 10, 26, 50, 62, 104,

said handle comprising at least one grip part 12, 72, 106 that is firmly connected to and firmly held at a mounting part 16, 70, 110 by at least one elastic,

vibration-damping element 14, 24, 52, 108 located between the grip part and the mounting part,

wherein the grip part is affixed to a housing via the mounting part which is screwed into the housing so that the elastic element is mounted to the housing through the mounting part and also mounted to the grip part; and

wherein the connection between the grip part and the mounting part by means of the elastic element is secured by at least one movable retaining element 20, 22, 28, 64, 112 that prevents a separation of the grip part from the housing if the elastic element is damaged and ensures control of the power tool via the grip part at all times.

Turning now to the references and in particular to the patent to Forderer, it is respectfully submitted that this reference discloses a power tool with a handle 9 which is connected through an elastic, vibration-damping element 6 with a plug 41 as shown in Figures 2 and 3. A second plug 31 is inserted into an end section 30 on the vibrationdamping element 6, to expand the vibration-damping element 6 radially outwardly and thereby to press the vibration-damping element 6 with its outer contour with a receding groove 21 form-lockingly into a corresponding inner contour with holding rib 25 of a housing 2. In the same way also the other end 46 of the vibration-damping element 6 is mounted on the handle 9. Here the plug 41 is inserted into the section 40 of the vibration-damping element 6 as shown in Figures 2 and 3 and described in column 2, line 59, to column 4, line 11. Between the plug 41 and the handle 9 there is no direct contact, since the section 40 of the vibration-damping element 6 surrounds the plug and therefore is located between it and the handle 9. The both plugs 31, 41 are connected with one another through a coupling element 50.

The configuration of the vibration-damping element 20, 21, 22, 23 of the patent to Forderer is substantially similar to the configuration disclosed in the patent to Dorner. However, here the sleeve 50 which serves for expansion of the elastic element is connected with an additional screw 55 on the machine.

The power tool disclosed in the patent to Dorner has a handle 4, which is connected through the vibration-damping elements 20, 21, 22, 23 and plugs 50, 60 with the motor the machine as can be seen from Figure 2. The vibration-damping elements 20, 22, 23 are received at the side of the motor in a cap 41 and at the side of the handle in the seat 26. The plugs 50, 60 serve for expansion of the vibration-damping element 20, 21, 22, 23, to produce a hold on the outer edge in form of a pressing connection as explained in column 4, line 53, to column 5, line 7, as the plugs in the patent to Forderer. The plug 50 at the side of the machine is mounted with a screw 55 on the machine.

In contrast to the patent to Forderer, the patent to Dorner does not disclose any <u>retaining element</u> for preventing the loss of the handle 4 from the motor system 2' in the event of failure of the vibration-damping element 20, 21, 22, 23. Furthermore, the patent to Dorner can not provide the advantages which are provided in the present invention, namely that in the event of a damage of the elastic element a release of the handle from the machine housing is always reliably prevented. If the elastic element is torn, the handle separates from the machine part. The screw 50 does not take over any retaining functions. It serves exclusively for mounting of the machine-side plug 50.

If the situation deteriorates to a next step and a significant damage takes places, namely the complete loss of the elastic element, in the patent to Forderer the handle will separate from the machine part since the plug 41 in this case has no contact with the handle 9.

In the power tool in accordance with the present invention, the objective is achieved in that, in the event of a defect of an elastic element, a separation of the handle from the machine part is prevented at any time and in all possible situations.

This is achieved by the features which are defined in claim 16. As stated in claim 16:

"...that prevents a separation of the grip part from the housing if the elastic element is damaged and ensures control of the power tool via the grip part at all times".

With the feature "at all times", the whole spectrum of possible defects or breakdowns of the elastic element is encompassed. Also, in the extreme situation in which a complete loss of the elastic element takes place, the present invention also achieves its objective.

The power tool of the present invention uses this feature which is absolutely necessary for every retaining system. The system

provided for retaining must be completely independent from the system to be retained, since otherwise the breakdown of the system to be protected can influence the retaining system. In the present invention the independence of the retaining system from the system to be retained is achieved. The retaining element 20 because of its construction is completely independent from the condition of the elastic element 14. The retention of the handle 12 is guaranteed at all times. The use of the plug which serves for expansion of the elastic element 14 has no meaning in the present invention since it is possible to dispense completely with such auxiliary means and their mounting.

In the patent to Forderer the above mentioned dependence of the system can be clearly understood. The plug 41 in connection with the coupling 50 and the second plug 31 can operate as a retaining element only as long as the elastic element 22 is in a position to reliably hold the plug 41. This example shows the dependence of the plug 41 from the elastic element 22. The patent to Forderer shows a basically different principle for holding a handle on a machine system than in the applicant's invention. The construction extends a partially functionality of the elastic element into the mounting region 30, 40. A combination of the patent to Forderer with the patent to Dorner would not provide a person of ordinary skill in the art with any different knowledge or hint or suggestion,

since the principles of both patents are identical, and the patent to Dorner even more completely dispenses with the retaining element.

A person of ordinary skill in the art who familiarized himself with the references would have no hint or suggestion to arrive at the applicant's invention from the references, since both damping systems from the patents to Forderer and Dorner have a totally different construction and operation than in the applicant's invention.

The patent to Raddle also does not teach the new features of the present invention.

Claim 16 should be considered as patentably distinguishing over the art and should be allowed. The other claims depend on claim 16, they share their allowable features, and they should be allowed as well.

It is believed that this is how the second ground to be reviewed on appeal has to be taken care of.

It is therefore respectfully requested to reverse the Examiner's rejection of the claims over the art and to allow the present application with all the claims currently on file.

Respectfully submitted,

Michael J. Striker Attorney for Applicants Reg. No. 27233

CLAIMS APPENDIX

- 16. A power tool with at least one handle, said handle comprising at least one grip part that is firmly connected to and firmly held at a mounting part by at least one elastic, vibration-damping element located between the grip part and the mounting part, wherein the grip part is affixed to a housing via the mounting part which is screwed into the housing so that the elastic element is mounted to the housing through the mounting part and also mounted to the grip part; and wherein the connection between the grip part and the mounting part by means of the elastic element is secured by at least one movable retaining element that prevents a separation of the grip part from the housing if the elastic element is damaged and ensures control of the power tool via the grip part at all times.
- 17. The power tool according to Claim 16, wherein the retaining element is formed by a flexible component.
- 19. The power tool according to claim 16, wherein the retaining element is located in the elastic element along a centerline.
 - 20. The power tool according to claim 16,

wherein the retaining element, in the installed state, is subjected to tensile stresses, and the elastic element is subjected to compressive stresses.

- 21. The power tool according to claim 16, wherein the retaining element is formed by a band that encloses the elastic element.
- 22. The power tool according to Claim 16, wherein the retaining element is formed by a rigid component that is supported in movable fashion relative to the mounting part.
- 23. The power tool according to Claim 22, wherein the retaining element is formed by a rigid component and is firmly supported in the mounting part and movable relative to the grip part.
- 24. The power tool according to Claim 23, wherein the retaining element is firmly connected to a fastening screw located in the mounting part.
- 25. The power tool according to Claim 23, wherein the retaining element is formed by a screw.
 - 26. The power tool according to Claim 22,

wherein the retaining element is connected to the grip part via the elastic element and to the mounting part via the elastic element.

- 27. The power tool according to claim 21, wherein a maximum displacement of the elastic element is determined by means of the retaining element in at least one tilting direction.
- 28. The power tool according to claim 16, wherein the elastic element comprises a non-circular cross-sectional area at least closely before a seating surface of the elastic element for at least one element, the element being an element selected from the group consisting of the mounting element and the grip part, wherein the cross-sectional area is smaller than the seating surface.
- 33. The power tool according to claim 16, wherein the elastic element encloses the retaining element.
- 34. The power tool according to claim 16, wherein the grip part comprises a recess, in which the retaining element is located.
- 35. The power tool according to claim 34, wherein the recess is partially filled with the elastic element.

- 36. The power tool according to claim 16, wherein by means of the retaining element the grip part is connected to the mounting part in captive fashion.
- 37. The power tool according to claim 34, wherein the retaining element is formed by a screw having a screw head which is larger than the recess.
- 38. The power tool according to claim 34, wherein the elastic element has a flange gripping behind an edge region of the recess.
- 39. The power tool according to claim 37, wherein the elastic element has a flange preventing a direct contact between the screw head and the grip part.

RELATED PROCEEDINGS APPENDIX

None

EVIDENCE APPENDIX

None

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SIMULTANEOUS AMENDMENT

August 21, 2007

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

Simultaneously with filing of the Brief on Appeal in the above identified application, please amend the application as follows:

36. (currently amended) The power tool according to claim 16, wherein by means of the retaining element the grip part is connected to the mounting part in captive fashion.

REMARKS

This Amendment is submitted simultaneously with filing of the Brief on Appeal.

In the Final Action the Examiner rejected claim 36 for formal reasons. With the present Amendment claim 36 has been amended to eliminate the grounds for the formal rejection of claim 36.

Respectfully submitted,

Michael J. Striker Attorney for Applicants

Reg. No. 27233